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ABSTRACTS, 1925.

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- 2-*p*-Methoxyphenylindole (KORCZYŃSKI and KIERZEK), i, 973, 1098.
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- 2-*p*-Methoxyphenyl-3-*p*-methoxybenzylquinoxaline (MALKIN and ROBINSON), i, 559.
- 2-*p*-Methoxyphenyl-5-methoxyindole (KORCZYŃSKI and KIERZEK), i, 973, 1098.
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- 4-Methoxyphenyl β -methoxystyryl ketone (MALKIN and ROBINSON), i, 559.
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- β -*p*-Methoxyphenylthiolpropionic acid (KROLLPFEIFFER, SCHULTZE, SCHLUMBOHM, and SOMMERMEYER), i, 1305.

- 4-Methoxyphenyl 3:4:5-trimethoxystyryl ketone, 2-hydroxy-, and its acetyl derivative (DEAN and NIERENSTEIN), i, 952.
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- β -Methoxypropionhydroxamic acid, and its potassium salt and derivatives (JONES and POWERS), i, 14.
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- Toluenes**, *as-trinitro-*, reactions of (BRADY, HEWETSON, and KLEIN), i, 16.
- v-Toluenesazoacetylacetone*, and its derivatives, and 3-nitro- (BÜLOW and SPENGLER), i, 1102.
- p-Toluenesazoallylformaldoxime* (WALKER), i, 1193.
- p-Toluenesazobenzylformaldoxime*, and its phenylcarbamate (WALKER), i, 1193.
- 4-p-Toluenesazo-3:5-dimethylisooxazole**, and 4-*m*-nitro- (BÜLOW and SPENGLER), i, 1102.
- 4-p-Toluenesazo-3:5-dimethylpyrazole**, and its salts, and 4-*m*-nitro- (BÜLOW and SPENGLER), i, 1102.
- Toluene-3-azo-oximinoacetotoluidides** (KARRER, DIECHMANN, and HAEBLER), i, 243.
- 4-p-Toluenesazo-1-phenyl-3:5-dimethylpyrazole**, and 4-*m*-nitro- (BÜLOW and SPENGLER), i, 1102.
- 1-p-Toluenesazoxy-2-aminonaphthalene** (CHARRIER, CRIPPA, TOIA, and BIANCHESI), i, 591.
- p-Toluenesulphenanilide* (LECHER, HOLSCHNEIDER, KÖBERLE, SPEER, and STÖCKLIN), i, 390.
- p-Toluenesulphobenzylamide* (HOLMES and INGOLD), i, 1143.
- p-Toluenesulphobenzylmethylamide*, and its hydrochloride (HOLMES and INGOLD), i, 1143.
- o-Toluenesulphonamidobenzaldoximes*, and the corresponding acetates (v. AUWERS), i, 1461.
- o-2-Toluenesulphonamidobenzonitrile* (v. AUWERS), i, 1460.
- 1-p-Toluenesulphonamidonaphthalene-8-sulphonic acid**, and its sodium salt (FINZI), i, 654.
- Toluene-*o*-sulphonic acid**, electrochemical oxidation of (FICHTER and STOCKER), i, 239.
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- Toluene-*p*-sulphonic acid**, esters, alkylation by (FINZI), i, 648.
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- Toluenesulphonic acids, *dinitro-***, sodium salts (BRADY, HEWETSON, and KLEIN), i, 16.
- d-α-p-Toluenesulphonoxypropionic acid***, and its ethyl ester and amide (KENYON, PHILLIPS, and TURLEY), i, 507.
- p-Toluenesulphonyl chloride*, action of on nitrophenols (SANÉ and JOSHI), i, 134.

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- p-Toluenesulphonylhydrazine*, and its derivatives (FREUDENBERG and BLÜMMEL), i, 52.
- o-Toluenesulphonylindazoles* (v. AUWERS), i, 1461.
- Toluene-*p'*-sulpho-*p*-phenetidine**, nitro-derivatives, and their derivatives (REYERDIN), i, 1409.
- p-Toluenethiolsulphonic acid*, *o*-nitrophenyl ester (MILLER and SMILES), i, 392.
- m-Toluic acid*, 6-thiol- (KROLLFFEIFFER, SCHULTZE, SCHLUMBOHM, and SOMMERMEYER), i, 1306; (ARNDT), i, 1311.
- p-Toluic acid*, 2-amino- and 2-nitro-, diethylaminoethyl esters, and their hydrochlorides (SODERMAN and JOHNSON), i, 814.
- ω*-trichloro-, synthesis of (BÖESEKEN and GELISSEN), i, 30.
- Toluic acids**, hydroxylamine salts (OESPER and BALLARD), i, 1233.
- Toluic acids**, amino-, separation of (MAYER and SCHULZE), i, 1315.
- o-Toluidine*, 3:5-*di*bromo-, additive compounds of, with metallic salts (HANN and SPENCER), i, 653.
- 5-iodo-, preparation of, and its salts and derivatives (HANN and BERLINER), i, 908.
- m-Toluidine*, bromo-4:6-*di*hydroxy-, hydrobromide, and its derivatives (HENRICH and GÖTZ), i, 913.
- p-Toluidine*, surface tension of aqueous solutions of (EDWARDS), ii, 387.
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- ω-o-* and *p-Toluidineacetophenones*, hydrazones of (BUSCH, FRIEDENBERGER, and TISCHBEIN), i, 41.
- p-Toluidino-p-anisidino-1:4-naphthaquinone* (FRIES and BILLIG), i, 940.
- β-Toluidinobenzylmalonic acids*, esters of (WAYNE and COHEN), i, 550.
- 3-Toluidino-5-ketoisooxazoles** (WORRALL), i, 308.
- 3-Toluidino-5-ketopyrazoles** (WORRALL), i, 308.
- 1-Toluidinomethylbenzthiazoles**, and their derivatives (HUNTER), i, 1336.
- 2-p-Toluidino-1:4-naphthaquinone**, 3-chloro-2-*N*-nitroso- (FRIES and BILLIG), i, 939.
- 1-p-Toluidino-β-naphthol-4-sulphonic acid** (LANTZ and WAHL), i, 910.
- Toluidino-oximinopinaecin** (RHEINBOLDT and SCHMITZ-DUMONT), i, 1132.

Toluene compounds, Me = 1.

- Toluidino-5-phenyl-1:3:4-thiadiazines**, and their hydrobromides and derivatives (BOSE), i, 1465.
- m-Toluidino-m-toluthiazole*, and its derivatives (LEVI), i, 445.
- 5-Toluidino-4-o-tolyl-1:2:4-triazole**, 3-thiol-, derivatives of (FROMM and SZENDRÖ), i, 985.
- p-Toluidino-3:4:5-trimethoxyphenyl-carbinol*, and its hydrochloride (SONN and MEYER), i, 932.
- p-Toluiminoisothio-p-toluamide*, and its hydrochloride (ISHIKAWA), i, 1149.
- p-Toluoyl chloride*, 2-nitro- (SODERMAN and JOHNSON), i, 814.
- Toluylacetamides**, hydroxy- (ANSCHUTZ, ASCHENBERG, KUCKERTZ, KRONE, RIEPENKRÖGER, and ZERBE), i, 667.
- o-Toluylbenzoic acid*, methyl ester (WEISS and KOREZYN), i, 560.
- o-Toluylbenzoic acids* (BRAND, LUDWIG, and BERLIN), i, 904.
- m-Toluylbenzoic acid*, *o*-4-bromo- (HELLER and MÜLLER-BARDORFF), i, 546.
- m-Toluoyl-3:4:5-6-tetrachloro-2-benzoic acid*, 2'-hydroxy- (ORNDORFF and PATEL), i, 672.
- 8-Toluoyl- α -naphthoic acid** (MASON), i, 33.
- β -Toluoyloxypropionic acids**, and their amides (POWELL and JOHNSON), i, 278.
- γ -*m*- and *p*-Toluoyloxypropyl alcohols (POWELL and JOHNSON), i, 278.
- 2-o-Toluoylphenyl-di-o-tolylcarbinol** (WEISS and KOREZYN), i, 560.
- Toluquinone**, action of azides with (CHATTAWAY and PARKES), i, 985.
- Toluyleneamidine-2-phenyl-o-carboxylic acid**. See 4-Methylbenziminazole-2-benzoic acid.
- m-Tolyl hydroxyethyl ether* (CASSELLA & Co.), i, 397.
- p-Tolyl p*-acetoxylbenzyl ether (PUMMERER, PUTTFARCKEN, and SCHOPFLOCHER), i, 1263.
- isoamyl sulphide* (GILMAN, BEABER, and MYERS), i, 1057.
- benzyl ether (v. BRAUN and REICH), i, 1405.
- β -chloroethyl sulphide (LECHER, HOLSCHNEIDER, KÖBERLE, SPEER, and STÖCKLIN), i, 390.
- cinnamyl ether (CLAISEN, KREMERS, ROTH, and TIETZE), i, 656.
- methyl ether, 2-amino-, and 5-bromo-2-amino-, 2-acetyl derivatives (GRIFFITH and HOPE), i, 827.
- o*- and *p*-Tolyl acetates, action of sodium on (HALL), i, 23.
- p-Tolylacetaldehyde p*-nitrophenylhydrazones (STEPHEN), i, 1131.

Toluene compounds, Me = 1.

- o*-Tolylacetic acid, ω -amino- and its derivatives (v. BRAUN and REICH), i, 1407.
- p-Tolylisoamylsulphone* (GILMAN, BEABER, and MYERS), i, 1057.
- o-Tolyl anisyl ketone* (DE DIESBACH and STREBEL), i, 1435.
- o-Tolylarsinic acid* (BURTON and GIBSON), i, 84.
- Tolyl-5-arsinic acids**, diamino-, and nitroamino-, benzoyl derivatives (HAMILTON and MAJOR), i, 990.
- N-p-Tolylbenzimidazole-p-tolyl ether* (CHAPMAN), i, 1401.
- o-Tolylbenzylketimine*, and its hydrochloride (JASPERS), i, 936.
- p-Tolylborneol* (LEDUC), i, 821.
- p-Tolylcamphene* (LEDUC), i, 821.
- o*- and *p*-Tolylcarbamic acids, dinitro-, esters of (KNIPHORST), i, 906.
- o-Tolylcarbamide*, 5-iodo-, and its hydrochloride (HANN and BERLINER), i, 908.
- m-Tolylcarbamide*, 2:4- and 4:6-dinitro- (GIUA and PETRONIO), i, 1397.
- o*- and *p*-Tolylcarbamides, dinitro- (KNIPHORST), i, 906.
- o-Tolylcarbylamine*, 5-iodo- (HANN and BERLINER), i, 908.
- p-Tolylcitronellylamine*, and its derivatives (RUPE and RINDERKNECHT), i, 658.
- m-Tolylecyanamide*, 4:6-dinitro- (GIUA and PETRONIO), i, 1397.
- 1-Tolyl-3:5-diketopyrazolidines**, tolylhydrazine derivatives of (VAN ALPHEN), i, 83.
- p-Tolyl dimethylaminomethyl-p-tolylmethane*, and its hydrochloride (SOMMELET), i, 803.
- p-Tolyl diphenyl- α -naphthylmethyl chloride* and methyl ether (DILTHEY), i, 653.
- p-Tolyl diphenyl ketone*, and its oxime (DILTHEY), i, 653.
- β -Tolylethylamines, ω -chloro-, salts and derivatives of (v. BRAUN and REICH), i, 1406.
- α -o-Tolyl- β -ethylcarbamide* (KNIPHORST), i, 906.
- o-Tolylethylketimine*, and its hydrochloride (JASPERS), i, 936.
- α -Tolyl- $\beta\beta$ -ethylnitrocarbamides*, dinitro- (KNIPHORST), i, 906.
- p-Tolylidenemalononic acid*, and its ethyl ester (CHRZASZCZEWSKA), i, 956.
- p-Tolylidenementhone*, and its hydrochloride (SAMDAHL), i, 415.
- 5-Tolylimino-4-acetyl-2-methylthiol-4:5-dihydrothiodiazole** (GUHA and RAY), i, 703.

Toluene compounds, Me = 1.

- 1-Tolylimino- β -naphthaquinone (SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES), i, 413.
- 5-Tolylimino-2-thion-2:3:4:5-tetrahydro-1:3:4-thiadiazole, and its derivatives (GUHA and RAY), i, 703.
- o*-Tolylcycloiminotoluinone (CHATTAWAY and PARKES), i, 985.
- 2-*p*-Tolylindazole, 3-cyano-, and its oxide (HELLE and SPIELMEYER), i, 838.
- 1-Tolylindazoles, 4-nitro- (v. AUWERS and FRESE), i, 1102.
- 2-*p*-Tolylindazole-3-carboxylic acid (HELLER and SPIELMEYER), i, 838.
- p*-Tolylmercuric hydrogen carbonate and mercaptan (KOTEN and ADAMS), i, 236.
- p*-Tolylmercuri-2:4:6-trinitrophenyl (KOTEN and ADAMS), i, 237.
- o*-Tolylmethylketimine, and its hydrochloride (JASPERS), i, 936.
- α -*p*-Tolyl- $\beta\beta$ -methylnitrocarbamide, 2:6-dinitro- (KNIPHORST), i, 907.
- 3-*m'*-Tolyl-5-methylpyrazole, 3:2'-hydroxy- (WITTIG), i, 279.
- 4-*p*-Tolylmorpholine (CRETCHER and PITTENGER), i, 228.
- Tolynaphthalimide, *o*-amino- (CHAKRAVARTI), i, 162.
- 2-Tolyl- $\alpha\beta$ -naphthatriazoles, and their oxides, and 4-hydroxy- (CHARRIER, CRIPPA, TOIA, and BIANCHETTI), i, 591.
- 1-*p*-Tolyl-*lin*-naphthatriazole-4:9-quinone (FRIES and BILLIG), i, 940.
- m*-Tolyl- α - and - β -naphthylamines, dinitro- (BRADY, HEWETSON, and KLEIN), i, 16.
- s o*-Tolyl- α -naphthylcarbamide, 5-iodo- (HANN and BERLINER), i, 903.
- α -*m*-Tolyl- β -nitrocarbamide, α -4:6-dinitro- (GIUA and PETRONIO), i, 1397.
- α -*m*-Tolyl- $\alpha\beta$ -dibenzoylthane (CONANT and LUTZ), i, 682.
- α -Tolyl- $\alpha\beta$ -dibenzoylthylenes (CONANT and LUTZ), i, 652.
- 2-*p*-Tolyl- $\alpha\beta$ -2:3-dihydro-*p*-benzoquinonemethane, and its derivatives (PUMMERER, PUTTFARCKEN, and SCHOPFLOCHER), i, 1262.
- p*-Tolyl- $\alpha\beta$ -*P*-oxodihydrobenzodiazaphospholium (AUTENRIETH and BÖLLI), i, 1469.
- p*-Tolyl- $\alpha\beta$ -*P*-oxotetrahydrodiazaphospholium (AUTENRIETH and BÖLLI), i, 1469.
- p*-Tolyl- $\alpha\beta$ -*p*-thiodihydrobenzodiazaphospholium (AUTENRIETH and MEYER), i, 990.
- p*-Tolyl- $\alpha\beta$ -thiophosphoryl dichloride (AUTENRIETH and MEYER), i, 807.
- o*-Tolylphenylketimine, and its derivatives (JASPERS), i, 936.

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- γ -*o*- and -*p*-Tolylpropinenes (BERT, DORIER, and LAMY), i, 1373.
- β -*m*-Tolylpropionic acid, α -cyano- (BAKER and LAPWORTH), i, 30.
- 1-*p*-Tolyl-2-pyrrolidone, and its picrate (LIFF and CASPERS), i, 963.
- 3-Tolylrhodanylidene- $\Delta^{5,3}$ -oxindoles (HANN), i, 987.
- p*-Tolylselenoglycollic acid, and its salts (MORGAN and PORRITT), i, 1197.
- p*-Tolylselenoxyglycollic acid (MORGAN and PORRITT), i, 1197.
- 4-*p*-Tolylsemicarbazide, and its derivatives (WHEELER and BOST), i, 317.
- p*-Tolylsuccinic acid (CHRASZCZEWSKA), i, 956.
- p*-Tolylsulphonyl- β -phenylpropionic acid (ARNDT), i, 1310.
- β -*p*-Tolylsulphonylpropionic acid (ARNDT), i, 1310.
- β -*p*-Tolylsulphoxypropionic acid (ARNDT), i, 1310.
- Tolyl-2-thio-4-ketothiazolidines, condensation of, with substituted vanillins (HANN), i, 1105.
- β -*p*-Tolylthiol-*n*-butyric acid (KROLL-PFEIFFER, SCHULTZE, SCHLUMBOHM, and SOMMERMEYER), i, 1305.
- α -*p*-Tolylthiodiphenylacetic acid (BISTRZYCKI and RISI), i, 1426.
- 2-*p*-Tolylthiophen (CHRASZCZEWSKA), i, 956.
- o*-Tolyl *p*-tolyl ketone (DE DIESBACH and STEBEL), i, 1435.
- 4-*o*-Tolyl-1-*o*-tolylthiocarbamidophenylthiosemicarbazide (GUHA and RAY), i, 1462.
- Tomato plants, nutrition and growth of (KRAYBILL and SMITH), i, 1122.
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- Torulin (KINNERSLEY and PETERS), i, 1516.
- Tourmaline in Dartmoor granite (BRAMMALL and HARWOOD), ii, 819.
- Toxicological analysis. See Analysis.
- Toxicology, chemical (KOHN-ABREST), i, 1116.
- Toxins (KARRER, WEBER, and VAN SLOOTEN), i, 1226.
conversion of, into anatoxins (BERTHELOT and RAMON), i, 481.
- Train oil, separation of unsaturated fatty acids in (TOYAMA and TSUCHIYA), i, 1129.
- Transfer resistance (FERGUSON and VAN ZYL), ii, 547.
- Transport numbers, apparatus for determination of (MACINNES and BRIGHTON; SMITH and MACINNES), ii, 542.

- Trees**, descent of nitrogenous substances in leaves of, in autumn fading (COMBES), i, 1023.
deciduous, constituents of leaves of (FRICKE), i, 764.
- Trehalose** in yeast (E. M. and F. C. KOCH), i, 1508.
- iso***Trehalose**, and its octamethyl ether (SCHLUBACH and MAURER), i, 888.
- Triacetoneamine**, nitroso-, catalysis of decomposition of, by hydroxyl ions (BRÖNSTED and KING), ii, 1171.
- ω*-**2:4-Triacetoxyacetophenone** (NIERENSTEIN, WANG, and WARR), i, 34.
- 2:4:6-Triacetoxybenzaldehyde** (PRATT and ROBINSON), i, 826.
- Triacetoxydihydroxychlorodititanium chloride** (GIUA and MONATH), i, 531.
- Triallylacetophenone** (HALLER, BAUER, and RAMART), i, 261.
- Triallylsulphonium iodide**, compound of iodoform with (STEINKOPF and BESSARITSCH), i, 496.
- β*-**Triamylose** nitrates (PRINGSHEIM, LEIBOWITZ, and SILMANN), i, 1244.
- Trianhydrotraphanthidin** (JACOBS and COLLINS), i, 566.
- Trianhydrotetrakisdiethylgermanediol** (MORGAN and DREW), i, 1197.
- 4:4':4''-Trianilinotri-*m*-tolylcarbinol** (GOMBERG and ANDERSON), i, 1065.
- 4:4':4''-Trianilinotri-*m*-tolylmethane** (GOMBERG and ANDERSON), i, 1065.
- Triaquotriamminecobaltitriaquotrissulphatocobaltate**. See under Cobalt.
- Triarsenatomanganic acid** (DEISS), ii, 893.
- Triarylcarbinols**, *o*-hydroxy-, tautomerism of (GOMBERG and MCGILL), i, 1269.
- Triazine derivatives**, thermal properties of binary mixtures of (PASCAL), ii, 953.
- Triazines**, preparation of (SOCIETY OF CHEMICAL INDUSTRY IN BASLE), i, 441.
- Triazinetricarboxylic acid**, complex iron derivatives of (PASCAL), i, 984.
- 1:2:3-Triazole**, 4:5-*di*cyno-, and its derivatives (GRISCHKEVITSCH-TROCHIMOVSKI; GRISCHKEVITSCH-TROCHIMOVSKI and KOTKO), i, 1104.
- 1:2:3-Triazolecarboxylic acid**, cyano-, and its ethyl ester (GRISCHKEVITSCH-TROCHIMOVSKI; GRISCHKEVITSCH-TROCHIMOVSKI and KOTKO), i, 1104.
- Triazoledicarboxylic acid**, *N*-hydroxy-, and its potassium hydrogen salt (WIELAND), i, 1050.
- 1:2:3-Triazole-4:5-dicarboxylic acid**, monoamide of (GRISCHKEVITSCH-TROCHIMOVSKI), i, 1104.
- 3:4:5-Tribenzoyloxybenzaldehyde** (SONN and MEYER), i, 932.
- 3:4:5-Tribenzoyloxybenzanilide** (SONN and MEYER), i, 932.
- Tribenzylammonium iodide**, compound of iodoform with (STEINKOPF and BESSARITSCH), i, 496.
- tri*iodide (STEINKOPF and BESSARITSCH), i, 497.
- Tribenzylmethylanmonium iodide**, compound of iodine with (STEINKOPF and BESSARITSCH), i, 495.
- 3:4:5-Tribenzoyloxybenzanilide** (SONN and MEYER), i, 932.
- Tributylcarbinol** (IVANOV), i, 503.
- Tributylmethane**. See *ε*-Butylnonane.
- Tricarboethoxyglycerol** (ALLPRESS and MAW), i, 4.
- Tricarboethoxyglycerol** (ALLPRESS and MAW), i, 4.
- Tri-*p*-carboxyphenylbismuthine di**chloride (SUPNIEWSKI), i, 1473.
- Tricyclene**, nitration of (NAMETKIN and ZABRODIN), i, 416.
- di*chloride. See Camphane, *dichloro*-.
- Tricyclo-(2,2,1,1,1,1)-dodecane-5:10:11:12-tetraone**, and its derivatives (WEDEKIND, MILLER, and WEINAND), i, 510.
- Triethylamine**, action of, on adipyl and *β*-methyladipyl chlorides (WEDEKIND, MILLER, and WEINAND), i, 510.
- compound of iodoform with (STEINKOPF and BESSARITSCH), i, 496.
- Triethylcarbonyl iodide** (MORGAN, CARTER, and DUCK), i, 877.
- Triethylene trisulphide**, supposed (BENNETT and BERRY), i, 695.
- tetr*asulphide, oxidation of, with potassium permanganate, and metallic salts derived therefrom (KÄY), i, 352.
- Triethylphosphine**, salts and derivatives from (COLLIE), i, 797.
- additive compound of carbon disulphide and (WIBAUT), i, 527.
- compounds of, with iodoform (STEINKOPF and BESSARITSCH), i, 496.
- Triethylpropylphosphonium iodide** (STEINKOPF and BESSARITSCH), i, 496.
- Triethyltrimethylenetriamine**, salts of (GRAYMORE), i, 76.
- Trimercuriaceto-*o*-toluidide acetate** (ROSSI and BOCCHI), i, 601.
- 3:4:5-Trimethoxyacetophenone**, oxime of, and *ω*-amino-, hydrochloride and *ω*-oximo-, and its sodium salt (SONN, MÜLLER, BÜLOW, and MEYER), i, 932.
- 3:4:5-Trimethoxy-1-*γ*-aminopropylbenzene** (MERCK, WOLFES, and DÜTZMANN), i, 393.
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